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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,708	12/13/2001	Satoshi Yoshihara	09792909-5277	2210

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EXAMINER

WORKU, NEGUSSIE

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/022,708

Applicant(s)

YOSHIHARA ET AL.

Examiner

Negussie Worku

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

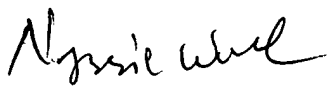
**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohmori (USP 4949189).

With respect to claim 1, Ohmori teach or discloses a solid-state image sensing device (as shown in fig 1) comprising: a plurality of groups of sensors, (CCD line sensor 3a and 3b of fig 1) each of the sensors (3a and 3b line sensors, having a pixel line transfer part and line sensor) comprises a pixel line and a charge-transfer part for transferring signal charge to be read from each pixel of the pixel line, see col.3, lines 20-40); and driving means, (driver circuit 10 of fig 1) by which when reading of the signal charge is performed at a different timing between said plurality of groups of sensors, (between a line sensor 3a and 3b) during a reading period of one sensor, stopping transfer driving of the signal charge of the other sensor is performed, see col.3, lines 40-

45).

With respect to claim 2, Ohmori discloses a solid-state image-sensing device (3a and 3b of fig 1), wherein said groups of sensors are formed on the same chip (image sensor of fig 1).

With respect to claim 3, Ohmori discloses a solid-state image sensing device (fig 1), wherein a reading period of the signal charge from said pixel line to said charge-transfer part in said plurality of groups of sensors (the reading period of the signal charge from plurality of line sensor such as 3a and 3b is determined by switch 4 of fig 1, col.3, lines 40-45) is different for each sensor (3a and 3b of fig 1).

With respect to claim 4, Ohmori discloses a solid-state image sensing device (fig 1), wherein said driving means (drive circuit 10 of fig 1) comprises transfer driving of a transfer stage in the vicinity of a final transfer stage of the charge-transfer part in said other sensor during the period when transfer driving of the signal charge in said other sensor is stopped, (drive circuit 10, transfer charge from line sensor 3a, when transfer charge 3d stopped by switch 4 of fig 1, see col.3, lines 40-45).

With respect to claim 5, Ohmori discloses a solid-state image sensing device (fig 1), wherein said driving means (driving circuit 10 of fig 1) comprises restarting of transfer driving of the signal charge in said other sensor in accordance with the output timing of said one sensor, (drive circuit 10, transfer charge from line sensor 3a, when transfer charge stopped from line sensor 3d by switch circuit 4 of fig 1, see col.3, lines 40-45).

With respect to claim 6, Ohmori discloses a method for driving a solid-state image sensing device, (line sensor 3a and 3b are driven by drive circuit 10 of fig 1) the image sensing device (fig 1) comprising a plurality of groups of sensors, (line sensor 3a and 3b), each of the sensors comprises a pixel line and a charge-transfer part (image sensor 3a of fig 1) for transferring a signal charge to be read from each pixel of the pixel line, the driving method comprises stopping transfer driving of the signal charge of the other sensor during reading period of one sensor when reading of a signal charge at a different timing between said plurality of groups of sensors is performed (drive circuit 10, transfer charge from line sensor 3a, when transfer charge stopped from line sensor 3d by switch circuit 4 of fig 1, see col.3, lines 40-45).

With respect to claim 7, Ohmori disclose a method for driving a solid-state image-sensing device (line image sensor of fig 1), wherein said groups of sensors (3a and 3b of fig 1) are formed on the same chip (fig 1).

With respect to claim 8, Ohmori discloses a method solid-state image sensing device (fig 1), wherein a reading period of the signal charge from said pixel line to said charge-transfer part in said plurality of groups of sensors (the reading period of the signal charge from plurality of line sensor such as 3a and 3b is determined by switch 4 of fig 1, col.3, lines 40-45) is different for each sensor (3a and 3b of fig 1).

With respect to claim 9, Ohmori discloses a method solid-state image sensing device (fig 1), wherein said driving means (drive circuit 10 of fig 1) comprises transfer driving of a transfer stage in the vicinity of a final transfer stage of the charge-transfer part in said other sensor during the period when transfer driving of the signal charge in said other sensor is stopped, (drive circuit 10, transfer charge from line sensor 3a, when transfer charge 3d stopped by switch 4 of fig 1, see col.3, lines 40-45).

With respect to claim 10, Ohmori discloses a method of driving solid-state image sensing device (fig 1), wherein said driving means (driving circuit 10 of fig 1) comprises restarting of transfer driving of the signal charge in said other sensor in accordance with the output timing of said one sensor, (drive circuit 10, transfer charge from line sensor 3a, when transfer charge stopped from line sensor 3d by switch circuit 4 of fig 1, see col.3, lines 40-45).

With respect to claim 11, Ohmori teaches or discloses image sensor (fig 1)

Art Unit: 2626

comprising a solid-state image sensing device for image sensor to read a document image (1a as shown in fig 1) comprising: a plurality of groups of sensors, (CCD line sensor 3a and 3b of fig 1) each of the sensors (3a and 3b line sensors, having a pixel line transfer part and line sensor) comprises a pixel line and a charge-transfer part for transferring signal charge to be read from each pixel of the pixel line, see col.3, lines 20-40); and driving means, (driver circuit 10 of fig 1) by which when reading of the signal charge is performed at a different timing between said plurality of groups of sensors, (between a line sensor 3a and 3b) during a reading period of one sensor, stopping transfer driving of the signal charge of the other sensor is performed, see col.3, lines 40-45).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

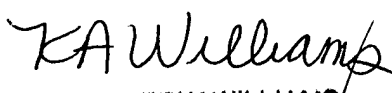
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Negussie Worku  
Patent Examiner  
Art Unit 2626  
July 7, 2005

  
**KIMBERLY WILLIAMS**  
**SUPERVISORY PATENT EXAMINER**